



# **2005 Macomb County Behavioral Risk Factor Survey**

**Macomb County Health Department**

## **Executive Summary**

Conducted for the Macomb County Health Department and  
Southeastern Michigan Health Association  
by Clearwater Research

## Executive Summary

The Southeastern Michigan Health Association (SEMHA), on behalf of the Macomb County Health Department (MCHD) contracted with Clearwater Research, Inc. (Clearwater) to design and administer the Macomb County Behavioral Risk Factor Survey (Macomb BRFS) based on the Centers for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance System (BRFSS) standards and protocols. Clearwater consulted with SEMHA and MCHD on instrument design and data collection of 1,116 adult residents of Macomb County aged 18 and older, as well as a proxy survey of 214 children aged 5-15 years. Data collection was from June 6, 2005 through September 12, 2005 with interviews lasting an average of 12.03 minutes.

The survey results will be used to monitor trends or changes in baseline behavioral risk factors, measure community health improvement indicators and guide the health department toward establishment of activities that will advance the health status of Macomb County residents. Data were compared to BRFSS data collected for the state of Michigan and the US. Each topical area of the study is summarized below.

### *General Health Status*

#### **Perceived General Health**

- Nearly one-fifth (19.1 percent) of respondents described their overall health as "excellent." A vast majority of Macomb County residents reported their general health status as "good" or better (87.2 percent) while just over one-in-ten (12.9 percent) reported their health as less than "good."
- A smaller percentage of Macomb County residents reported their health status as "fair" or "poor" (12.9 percent) in 2005 when compared with residents of the State of Michigan in 2004 (14.4 percent), however differences were not statistically significant. The percentage of the population reporting less than "good" general health was statistically smaller among residents of the state of Michigan as well as among residents of Macomb County than the 2004 national prevalence of 16.4 percent.

### *Healthy Days*

#### **Physical Health**

- Macomb County adults experienced a mean of 3.0 out of the previous thirty days when their physical health was not good. Among both Michigan residents and the US population, adults reported 3.6 days out of the past thirty when they felt their physical health was not good in 2004.
- Among Macomb County adults, 7.9 percent experienced at least fifteen days out of the past thirty when their physical health was not good. This percentage was slightly lower than the percentage of all Michigan residents with fifteen or more days of poor physical health in the past thirty days (9.6 percent) reported in 2004, but the difference was not statistically significant. Nationally, a significantly larger percentage of adults (9.9 percent) reported fifteen or more days of poor physical health out of the last thirty in 2004 when compared with Macomb County.

## **Mental Health**

- Macomb County adults experienced a mean of 2.8 out of the previous thirty days when their mental health was not good, including stress, depression, and problems with emotions. Macomb County's overall mean number of days of poor mental health was lower than the mean number among both Michigan residents (3.8 days) and the US (3.5 days) in 2004.
- The percentage of Macomb County adults reporting fifteen or more days of poor mental health (7.4 percent) was significantly lower than the overall US rate of 9.8 percent in 2004. The Macomb County rate was lower than Michigan's 2004 rate of 10.1 percent, but the difference was not significant.
- Generally, a higher percentage of the population in younger age groups experienced fifteen or more days of poor mental health in all geographic areas when compared to older age groups. Although adults aged 65 and older experienced significantly more days of poor physical health than younger age groups, these adults reported significantly less days of poor mental health than younger residents. This finding may indicate older adults face more physical challenges than those who are younger, but the impact of less than good physical health does not necessarily impact emotional health in the older population.

## **Health Care Access**

### **Health Care Coverage**

- The percentage of Macomb County residents between the ages of 18 and 64 without some form of health care coverage was 13.1 percent in 2005. The Macomb County rate was not significantly different than the percentage of Michigan residents in the same age group who had no health care coverage (14.2 percent) in 2004. Compared with the percentage of adults less than 65 in the US in 2004 (18.7 percent), Macomb County's percentage of uninsured 18-64 year olds was significantly lower.
- Residents between the ages of 18-64 who were more likely to reported no health care coverage were more likely to be less than 35 (18.8 percent), have incomes less than \$35,000 (11.8 percent), have less than a high school education (31.3 percent).

## **Chronic Disease Prevalence**

### **Diabetes**

- In Macomb County, 5.9 percent of adults had been told by a doctor that they have diabetes. The prevalence of diabetes in Macomb County was not statistically different than the prevalence in Michigan (7.6 percent) or the US (7.2 percent) in 2004.
- Residents who reported having been told by a doctor or other health care professional that they had diabetes were more likely to be 65 or older (15.2 percent), be Female (7.6 percent), have less than a high school education (14.9 percent), have an income less than \$15,000 per year (17.1 percent).

### **Hypertension**

- Over one-fourth (25.8 percent) of the Macomb County adult population had been told at some time in their life they had high blood pressure. Results were very similar to the

percentage of the 2003 Michigan population (26.8 percent) and 2004 US population who reported they had been told they had high blood pressure (27.8 percent).

- Residents who were more likely to report they had been told they had hypertension were over 55 (49.3 percent), male (27.9 percent), not educated beyond high school (36.9 percent), living with incomes less than \$15,000 per year (44.4 percent).

## **Cholesterol**

- Nearly one-third (31.3 percent) of Macomb County residents reported they had been told they have high blood cholesterol by a doctor, nurse or other health professional. The prevalence in Macomb County was lower than the US in 2004 (35.2 percent), but the difference was not statistically significant. Compared with Michigan in 2003 (37.6 percent), the difference was statistically significant.
- Residents who reported having been told by a doctor or other health care professional that they had high cholesterol were more likely to be 55 or older (53.6 percent), be Female (32.0 percent), have less than a high school education (50.6 percent), have an income less than \$15,000 per year (49.7 percent).

## **Asthma**

### **Lifetime Asthma**

- In Macomb County, 11.5 percent of adults had been diagnosed with asthma some time during their lifetime. While reported prevalence was slightly lower than in Michigan (13.5 percent) and the US (13.4 percent) in 2004, the differences were not statistically significant.
- Asthma prevalence was higher in younger and older age groups. In Macomb County, the prevalence of asthma was as high as 14.4 percent among those between the ages of 18 and 24, dropping to 7.7 percent between the ages of 45 and 54, then rose again to 9.8 percent among those 65 and older.
- Asthma prevalence does not appear to have a definitive relationship with socioeconomic factors such as education and income. While there were some variations in prevalence in Macomb County between education levels and income, there were no statistically significant differences. Variations are due to chance and not indicative of any systematic relationship.

### **Asthma Attacks**

- Among those diagnosed with asthma in Macomb County, 38.5 percent reported they had an episode of asthma or an asthma attack in the last 12 months. This percentage was significantly lower than Michigan (54.6 percent) and US residents (55.0 percent) reported in 2004.

## **Arthritis**

- In Macomb County, 28.9 percent of adults had been diagnosed with some form or variation of arthritis. The US prevalence of 29.2 percent and 2003 Michigan prevalence of 32.0 percent were not statistically significantly different.
- Residents who reported having been told by a doctor or other health care professional that they had arthritis were more likely to be 55 or older (57.3 percent), be Female (36.9 percent), have an income of less than \$25,000 per year (44.7 percent)

## **Osteoporosis**

- In Macomb County, 5.7 percent of all adults had been told they had osteoporosis. State and national data were unavailable for comparison.
- Residents who were more likely to report they had osteoporosis were more likely to be over 65 (18.6 percent), be female (9.9 percent), have less than a high school education (5.4 percent), have an income between \$15,000 and \$24,999 (12.2 percent).

## **Overweight and Obesity**

### **Obesity**

- In Macomb County, almost one-quarter (23.1 percent) of adults are categorized as obese (BMI equal to or greater than 30.0). The prevalence of obesity in Macomb County did not differ significantly from the prevalence in Michigan (25.5 percent) or the US (23.5 percent) in 2004. There were no significant gender differences in Macomb County.
- Characteristics of residents with a calculated BMI that categorized them as obese included being between 35 and 64 (26.0 percent), having less than a high school education (33.3 percent), having an income between \$25,000 and \$49,999 (27.5 percent).

### **Overweight**

- The prevalence of overweight (BMI between 25.1 and 29.9) adults in Macomb County was 40.0 percent in 2005. The prevalence was not statistically different than the overweight prevalence reported in Michigan (35.5 percent) or the US (36.7 percent) in 2004.
- Characteristics of residents more likely to have a calculated BMI that categorized them as overweight included being male (49.2 percent), being 35 or older (42.2 percent), having a college education (43.7 percent), having an income of \$50,000 or more (42.4 percent).

## **Immunizations**

### **Influenza Vaccination**

- In Macomb County, over one-quarter of all adults (26.5 percent) had received a flu shot in the past 12 months. The percentage of females receiving the vaccine was slightly higher (27.1 percent) than the percent of males (25.9 percent), but the differences were not significant.

### **Adults aged 65 and older**

- Among Macomb County adults aged 65 and older, nearly two-thirds (61.6 percent) had received a flu shot in the last 12 months. The percentage was slightly lower than the Michigan rate (66.6 percent) and the US rate (67.6 percent), but the difference was not significant. Males were slightly more likely to have received the vaccination (63.4 percent) than females (60.4 percent).

### **Pneumococcal Vaccination**

Among the Macomb County adult population, only one-quarter (25.1 percent) had been vaccinated against pneumococcal disease.

### **Adults aged 65 and older**

- Two-thirds (66.3 percent) of Macomb County adults over the age of 65 had received a pneumonia vaccine sometime in their life. The percentage of Macomb County seniors who had received the vaccination was slightly higher than percentages in the state (59.4 percent) and the nation (63.4 percent), but differences were not statistically significant.

## ***Health Risk Behaviors***

### **Tobacco Use**

#### **Current Smokers**

- Nearly one-quarter (24.4 percent) of Macomb County residents are current cigarette smokers. While the Macomb County rate does not differ significantly from the Michigan prevalence of current smoking (23.4 percent), both of those smoking rates are significantly higher than the percentage of smokers in the US in 2004 (20.7 percent).
- Residents who more likely to be current smokers were female (26.7 percent), less than 55 (28.5 percent), not college educated (32.0 percent).

#### **Secondhand Smoke**

- Macomb County residents reported they spent an average of 39.3 minutes each day exposed to secondhand smoke. Female residents had slightly longer periods of exposure (46.2 minutes) than males (32.5 minutes) and residents between the ages of 18 and 24 reported they spent nearly an hour and a half a day (86.2 minutes) exposed to secondhand smoke.
- College graduates had significantly less secondhand smoke exposure on a daily basis (15.0 minutes) than those who had some college (49.8 minutes) or a high school education (59.1 minutes).

### **Alcohol Consumption**

#### **Mean Number of Drinks**

- Among all Macomb County residents, the average number of drinks consumed on days when alcohol was drunk was 1.9. The mean number of drinks consumed by males (2.3) was significantly higher than the number consumed by females (1.5).
- Residents who drank a significantly higher average number of drinks were more likely to be male (2.3 drinks), be between the ages of 35 and 44 (2.6 drinks), have less than a high school education (3.4 drinks), have an income of less than \$15,000 (2.1 drinks) or more than \$50,000 (2.0 drinks).

#### **Binge Drinking**

- Over one-in-five (21.9 percent) of Macomb County residents reported they binge drank (consumed more than five servings of alcoholic beverages on one occasion) in the last thirty days. While the Macomb County rate of binge drinking was not significantly different than the rate in Michigan (16.2 percent), it was significantly higher than among the US population (14.8 percent).

- While binge drinking was not associated with any specific socioeconomic indicators, residents who were more likely to have reported binge drinking on one or more occasions in the past thirty days were characterized as male (29.7 percent), less than 55 (28.6 percent).

## **Fruit Juice Consumption**

- Macomb County residents drank 0.6 servings of fruit juice each day. Males had a slightly higher average of fruit juice consumption (0.7) than females (0.5).

## **Physical Activity**

### **Leisure Time Physical Activity**

- Just under one-fifth (17.7 percent) of Macomb County residents had not participated in leisure time physical activity within the past month. Participation in leisure time physical activity was significantly lower among Michigan residents with 22.1 percent not participating in leisure time physical activity in 2004. Leisure time physical activity was also significantly lower in the US. In 2004, 24.0 percent of the US population had not participated in leisure time physical activity.
- Residents who reported no leisure time physical activity were more likely to be over 55 (28.5 percent), be female (19.4 percent), have less than a high school education (38.0 percent), have an income less than \$25,000 (27.6 percent).

### **Moderate Physical Activity**

- Among Macomb County residents, just under one-third (31.5 percent) met the recommendations for moderate physical activity. The percentage in Macomb County was slightly lower than among Michigan (35.8 percent) and US residents (33.9 percent), but the differences were not statistically significant.

### **Vigorous Physical Activity**

- Among Macomb County residents, just over one-fourth (24.7 percent) met recommendations for vigorous physical activity. The rate in Macomb County was slightly lower than among Michigan (26.6 percent) and US residents (26.0 percent), but the differences were not statistically significant.

## **HIV/AIDS**

### **Chances of acquiring HIV**

- When asked what their chances of becoming infected with HIV were, 81.7 percent of the Macomb County population indicated there was no chance they would become infected. An additional 16.3 percent indicated there was a low chance they would become infected. Only 0.7 percent responded they were at high risk for acquiring HIV. Overall, females, older adults and those with higher incomes were the most likely residents to indicate they had no chance of becoming infected with HIV.

### **Risk behaviors for acquiring HIV**

- Among Macomb County residents, 1.6 percent of the adult population reported having engaged in at-risk behaviors for HIV in the past year. At risk behaviors include having used intravenous drugs in the past year, been treated for a sexually transmitted or venereal disease in the past year, had given or received money or drugs in exchange for sex in the past year or had anal sex without a condom in the past year. The Macomb County rate was significantly lower than Michigan's (3.7 percent) or the rate among residents of the US (4.1 percent).



## *Women's Health*

### **Clinical Breast Exams**

- Among Macomb County females, 76.6 percent had a clinical breast exam (CBE) within the recommended time frame for their age group. The rate is slightly higher than the rate among female residents of Michigan (74.2 percent), but the differences were not statistically significant. Percentages of women receiving timely CBEs were significantly higher in Macomb County and Michigan when compared with the overall rate in the nation (71.7 percent).
- There were no significant differences among age groups in Macomb County with respect to receiving timely CBEs with the exception of women aged 30-39 (92.1 percent). Between the ages of 30 and 39, less than one out of ten women failed to receive a CBE within the recommended timeframe.

### **Mammograms**

- Among Macomb County females, 57.4 percent had received a mammogram within the past two years and 45.9 percent had received one within the past year. These rates were not statistically different than the rates for Michigan (53.9 percent within the past two years and 42.3 percent within the past year) or the US (51.4 percent in the past two years and 39.7 percent in the past year).

### **Women over the age of 40**

- Among Macomb County women over the age of 40, over two-thirds (64.9 percent) had received a mammogram within the past year. Eight out of every ten (80.1 percent) had received a mammogram within the past two years. The rates for both Macomb County and Michigan (78.9 percent within the past two years and 62.7 percent within the past year) were statistically significantly higher than the percentages among women in the nation. Over half (58.3 percent) of women in the US over the age of 40 had received a mammogram in the past year and just under one-quarter (24.6 percent) had received one within the past two years.

### **Pap Tests**

- Nearly nine out of ten (86.0 percent) Macomb County females had received a Pap test within the past three years. This rate was not significantly different than the rate for Michigan (82.6 percent), but was statistically significantly higher than the rate among all females in the US of 81.8 percent.
- Women between the ages of 35 and 44 were significantly more likely to have received a Pap in the past three years (96.3 percent).
- Those women who had education beyond high school (91.3 percent) were significantly more likely to have received a Pap test in the past three years than those without education beyond high school (78.7 percent).

### *Prostate Cancer Screening*

- Among Macomb County males aged 50 and older, 83.4 percent had received a PSA test sometime in their lifetime. This percentage was slightly higher than in Michigan males aged



50 and older (80.5 percent) and significantly higher than the percentage of men in the US who were 50 years old or older who had received a PSA during their lifetime (76.5 percent)

### *Colorectal Cancer Screening*

- Among Macomb County adults aged 50 and older, 60.2 percent had received a sigmoidoscopy or colonoscopy sometime in their lifetime. The Macomb County rate was nearly identical to the Michigan rate (60.3 percent), but significantly higher than the national rate of 53.8 percent.

### *Child Proxy Summary Results*

#### **Physical Fitness Level**

- Macomb County adults were asked to describe the child's physical condition and fitness level. In Macomb County, 61.2 percent of the children were described as being in "excellent" physical condition and fitness level. Only 3.2 percent of children were described as having less than "good" overall fitness.
- Among Macomb County children, children got at least 30 minutes or more of moderate exercise an average of 5.9 days per week.

#### **Child Weight**

- Among Macomb County children aged five to fifteen, 12.7 percent were described as overweight. Nearly the same percentage (11.2 percent) were described as underweight.
- One-in-twenty (5.3 percent) Macomb County children between the ages of five and fifteen had been described by a doctor as overweight or obese.

#### **Child Nutrition**

- Nearly one-in-ten (9.6 percent) of Macomb County children between the ages of five and fifteen eat fast food three or more times a week. The percentage of girls that ate fast food that often was double (13.0 percent) the percent of boys (5.9 percent). Children between the ages of ten and fifteen were also twice as likely (13.4 percent) to eat fast food three or more times a week than those aged five to nine (5.4 percent). A small proportion (2.8 percent) of the children never ate fast food.
- The average number of servings of fruits and vegetables for Macomb County children was 2.4 servings per day.
- Over two-thirds (69.1 percent) of Macomb County children ate snack foods high in sugar or fat such as candy, chips and baked goods at least once a day.
- Macomb County children drank sweetened beverages 1.4 times per day on average.
- Children drank juice an average of 4.9 times per day. Girls were twice as likely to consume juice than boys.
- Children in Macomb County between the ages of five and fifteen had 2.2 servings of dairy products per day, on average.

## Screen Time

- In Macomb County, children spent an average of two hours and 21 minutes engaging in screen-time activities on a daily basis. Children between the ages of ten and fifteen had more screen time on a daily basis (two hours and 25 minutes) than children between the ages of five to nine (two hours and 16 minutes).

## Physical Activities

- Macomb County children aged five to fifteen participated in organized physical activities 2.2 times per week on average. Children aged ten to fifteen participated in organized physical activities (2.5 times per week) more often than children between the ages of five and nine (1.9 times per week).
- Macomb County children aged five to fifteen attended physical education (PE or Gym) classes 2.3 days per week, on average. Children over the age of nine spent nearly twice (2.7) many days in gym than those aged five to nine (1.8).

## Child Safety

- Only 28.8 percent of children always wore a helmet when bike riding, using a skateboard or roller-blading. Over one-fourth (27.0 percent) never wore a helmet when engaging in these activities where helmets are recommended.

## Child Health Care Coverage

- Nearly all (96.8 percent) children in Macomb County had some kind of health care coverage. Children between the ages of five and nine were slightly more likely to be covered by health care coverage (99.2 percent) than children between the ages of ten and fifteen (94.5 percent)

## Child Health

- Nearly nine out of ten (87.0 percent) of all Macomb County children had received a blood pressure check. Among those who had received a blood pressure check, nearly all (98.7 percent) had normal blood pressure levels.
- A small proportion (18.0 percent) of Macomb County children had ever had their cholesterol checked. Among those children who had received a cholesterol check, nearly all (98.3 percent) had normal cholesterol levels.

## Family Activities

- Nearly half (49.1 percent) of all children aged five to fifteen always participated with their families in some activity such as biking, walking or swimming.